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ICMEE Learning Packets: LEVEL 2 of English
Proficiency (K-12)

International Coalition for Multilingual
Education and Equity (ICMEE)

2020

9th–10th Grade: English Level 2, Learning Packet #4 • Theme: Nature in America

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International Consortium for Multilingual Excellence in Education



August 15th, 2020

Dear District/School Personnel:

We are a consortium of researchers, teacher educators, and teachers who believe in and strive to foster multilingual excellence. Therefore, during this time of crisis and difficulty, we are eager to put our expertise and passions to use to try to be of assistance. We initially designed 21 immediate-response packets for K-5, as soon as the pandemic forced schools to shut down. We then applied for and received a grant that has allowed us to create more than 100 full activity packets, ranging from Levels 1-3 of English proficiency, and grades K-12.

The breakdown of packets is as follows:

Level 1 – Entry into English

Emphasis on developmentally appropriate interesting/challenging tasks

- K-2
- 3-5
- 6-8 with a literacy background
- 9-12 with a literacy background
- 6-8 without literacy background
- 9-12 without literacy background

Level 2 – Building Background

- K-1
- 2-3
- 4-5
- 6-8
- 9-10
- 11-12

Level 3 – Interdisciplinary Inquiry

- K-1
- 2-3
- 4-5
- 6
- 7-8
- 9-10
- 11-12

With this letter, is an “Activity Packet” that can be used freely with any group of students or families as you see fit. Each packet includes interdisciplinary activities designed to be completed within a week. Teachers from around the country have designed, developed, and created these packets, each focusing on the topics of their choice. Because learning academic content can happen within any thematic context, these packets are designed to be diverse, dynamic, and engaging for students of all backgrounds. The topics covered in these units range from cultures, animals, natural disasters, inventions, and much more. You will see each teacher’s personality reflected strongly in these packets, and our hope is that this will capture students in a way similar to that of a rich and immersive classroom environment.

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Our hope is that these materials can provide some meaningful learning supports to students and families who may not have access to online learning opportunities. However, we can also imagine a variety of ways that these packets can provide learning opportunities outside of our original intent and purpose. Please use these activity packets in any way you see fit for your students and families. We will be so pleased to learn of how they might be useful, particularly for your multilingual students and their families. We think it might be particularly helpful for you to print packets and mail them to families, but we also see opportunities to work with local agencies, leave printed-out packets for pick-ups at schools, etc.

We designed these activities based around several big ideas:

- Productive play and inquiry
- Grade level and English Language Development standards/curriculum
- Fostering multilingual language development
- Providing opportunity for all four language domains (reading, writing, speaking and listening)

These packets are self-contained. Everything a child will need to be successful with the activities is provided in the packet. Students will only need a writing utensil. Additional tools like crayons or scissors are optional.

We have also included a letter to parents. We hope this will help parents understand what students will be doing with the packet and that we encourage the use of all language resources available to the student. The packets are in English for the students, but the students can write, talk and engage with family members regarding the packet activities in any language they would like. We have translated the parent letter into Spanish, and we encourage districts to translate the letter into any other language that would be helpful for your local families.

Designing Activity Packets is a new initiative for us, though we have been designing professional learning opportunities (eWorkshops) for teachers of multilingual learners since 2011. Like our Activity Packets, those learning opportunities for teachers are free. To learn more about them and us, please visit our website at: <https://cehs.unl.edu/icmee/>

We are eager to be a helpful, collaborative partner in all learning needs related to multilingual students and their teachers, so please, do not hesitate to reach out to us with questions, ideas, concerns, feedback, etc. We are available at icmee@unl.edu.

Sincerely,

Kara Mitchell Viesca, PhD

Associate Professor of Language Education

University of Nebraska Lincoln

Teaching, Learning and Teacher Education

PI: International Consortium for Multilingual Excellence in Education

This packet was designed and created by **Morgan Spanel**
in collaboration with Aaron Johnson and Alexa Yunes.

The Standards that Informed the Development of this Packet are:

Common Core Math:

- HSA-SSE.A.1
- HSA-REI.B.3
- HSF.LE.A.3

Common Core Social Studies:

- RH.9-10.3
- RH.9-10.6

Common Core English Language Arts:

- CCW.9-10.1
- CCW.9-10.7
- CCW.9-10.9
- CCRI.9-10.9

Common Core Science & Technical Subjects:

- RST.9-10.7
- WHST.9-10.9

Art

- Anchor Standard 1
- Anchor Standard 4
- Anchor Standard 6

Physical Education

- National Standard 1
- National Standard 5

9th – 10th grade • English Level 2

LEARNING PACKET #4



Theme: Nature in America

International Consortium for Multilingual Excellence in Education



August 15th, 2020

Dear Families:

During the COVID-19 pandemic, it became necessary for students to learn at home. Many students have limited access to technology, others struggle with online learning, and some simply want more to do while they are at home. With these things in mind, we have created an extensive resource of learning materials that we hope will be helpful for your children to engage with. These Activity Packets were designed with your students in mind and are aligned with each of their grade level content. Each activity in the packets will help students continue with their schooling as well as continue to grow their multilingualism. We encourage you to talk to your student about what they are doing and let your child ask you about the topics they are learning about. The packet is in English, but we encourage you and your children to speak and think together in any language you would like to. We strongly encourage you to use the language you feel most comfortable using with your student. Supporting their learning in all the languages they know is helpful—even for developing their English! So, please encourage your student to do the work in the packet in any language they would like.

We know that families are dealing with a lot of stress and uncertainty right now, so we encourage you to play the role you would like to play with your student and their Activity Packet based on what works best for you. We recommend reading the information about the packet and activities and then discussing with your student how the packet works and how they can work through it. We believe that with that introduction, your student can do a lot, if not all, of the work themselves. However, if you are available to work more closely with your student (or for a sibling or other family member to do so), we encourage that as well. Please know, this is not intended to be something that adds stress and work to your family during this demanding time. We hope that this is a helpful resource so your student can continue growing academically while in unusual situations.

We also hope you will find these packets interesting and fun. We have integrated activities from all of the grade level content standards: English Language Arts, Mathematics, Social Studies, Science, Physical Education and Art. We have also developed different packets for the different levels of English proficiency, so your child should feel challenged but also capable of largely understanding the content in front of them.

6th-12th grade students are encouraged to talk about their learning as much as possible, even if it is not to one person in particular. Some packets will include activities where students can “use a cell phone” to record voice messages and post on social media, which we hope might be ways in which they can be encouraged to speak in English or in any language they prefer.

In these packets, we have also included the following activities:

- Dictionary. Each day we hope that your student will engage with words they find interesting and want to keep track of. We encourage students to use the dictionary activities to keep track of words they learn and find interesting. We also encourage students to use any language they would like as well as pictures to help them remember what the words mean.

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- Journal. Students should be encouraged to write in any language (or combination of languages) that they feel most inclined to. They can also use pictures as appropriate. We hope these journal spaces will also be points of conversation for your child with someone in their home.
- In this packet, students will learn about the 50 states in the United States, different biomes and National parks across the country, and adjectives we can use to describe these different environments. Students are encouraged to make connections to their own environments or places they have visited.

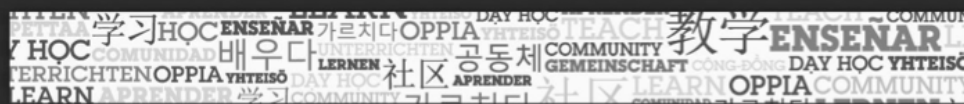
We hope that these activities will enhance your child's learning while we work through these very unusual circumstances. We also hope that they will give your child opportunities for productive play. If you have any questions or concerns about these packets, feel free to reach out to our project at icmee@unl.edu or by calling the Teaching, Learning and Teacher Education department at 402-472-2231.

Sincerely,

Kara Mitchell Viesca, PhD
Associate Professor of Language Education
University of Nebraska Lincoln
Teaching, Learning and Teacher Education
PI: International Consortium for Multilingual Excellence in Education

This packet was designed and created by **Morgan Spanel**
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15 de agosto del 2020

Estimadas familias:

Durante la pandemia del COVID-19, ha sido necesario que los estudiantes aprendan en casa. Muchos de los estudiantes tienen acceso limitado a la tecnología, otros tienen dificultad para aprender en línea y algunos simplemente quieren tener algo más que hacer mientras están en casa. Pensando en estas razones, hemos creado un recurso con una gran extensión de materiales de aprendizaje que esperamos serán útiles para que sus hijos participen activamente. Estos paquetes de aprendizaje fueron diseñados teniendo en mente a sus niños y están alineados a los contenidos de cada nivel de grado. Cada actividad en estos paquetes los ayudará a continuar con su escolarización, así como a seguir aumentando su multilingüismo. Lo alentamos a que hable con su estudiante sobre lo que está haciendo y deje que le pregunte sobre los temas que le interesan. El paquete está en inglés, pero le recomendamos a usted y a su estudiante que hablen y piensen juntos en el idioma que deseen. Le recomendamos encarecidamente que use el idioma con el que se sienta más cómodo al comunicarse con su estudiante, ya que respaldar su aprendizaje en todos los idiomas que sabe es útil, ¡incluso para su inglés! Por lo tanto, anime a su estudiante a hacer el trabajo en el paquete en cualquier idioma que desee.

Sabemos que las familias están lidiando con mucho estrés e incertidumbre en este momento, por lo que lo alentamos a que desempeñe el papel que le gustaría desempeñar con su estudiante y su paquete de actividades según lo que funcione mejor para usted. Le recomendamos leer la información sobre el paquete y las actividades que contiene y luego discutir con su estudiante cómo funciona el paquete y cómo pueden trabajar en él. Creemos que, con esa introducción, su estudiante puede hacer mucho, si no todo, el trabajo por sí mismo. Sin embargo, si usted está disponible para trabajar más estrechamente con su estudiante (o un hermano u otro miembro de la familia), también lo recomendamos. Por favor, tenga en cuenta que esto no pretende ser algo que agregue estrés y trabajo a su familia durante este momento tan desgastante. Por el contrario, esperamos que este sea un recurso útil para que su estudiante pueda continuar desarrollándose académicamente durante esta situación tan inusual.

También esperamos que ustedes encontrarán estos paquetes interesantes y divertidos. Hemos integrado actividades de todos los estándares de contenido de nivel de grado: Artes del Lenguaje en inglés, Matemáticas, Estudios Sociales, Ciencias, Educación Física y Arte. También hemos desarrollado diferentes paquetes para los diferentes niveles de dominio del inglés, de esta manera su hijo podrá sentir el desafío y también será capaz de comprender en gran medida el contenido que se les presenta.

Los estudiantes de 6to a 12avo grado son motivados a hablar sobre su aprendizaje tanto como sea posible, aun cuando no sea a una persona en particular. Algunos paquetes incluirán actividades en donde los estudiantes pueden “usar un teléfono celular” para grabar mensajes de voz y subirlos a las redes sociales; esperamos que estas sean formas que los animarán a hablar en inglés o en el idioma de su preferencia.

ICMEE is housed within:



LEARNER 学习 HÖC ENSEÑAR 가르치다 OPPIA YHTHEISO TEACH 教学 ENSEÑAR
 Y HOC 배우다 TÄRRICHTEN OPPIA YHTHEISO LERNEN 공동체 COMMUNITY GEMEINSCHAFT CÔNG ĐỒNG DAY HOC YHTHEISO
 TERRICHTEN OPPIA YHTHEISO DAY HOC 社区 APRENDER LEARN OPPIA COMMUNIT



- **Diccionario:** Esperamos que cada día su estudiante aprenda palabras que encontrará interesantes y querrá tener un seguimiento y registro de estas. Al final de los paquetes encontrarán páginas en las que su estudiante podrá mantener su propio diccionario. Recomendamos ampliamente que los estudiantes usen estas páginas para registrar palabras que les gusten o les parezcan interesantes. También alentamos a los estudiantes a usar cualquier lenguaje que deseen, así como imágenes para recordar el significado de las palabras.
- **Diario:** Cada día, los estudiantes tienen un tema corto de escritura al que pueden responder. Los estudiantes deben ser alentados a escribir en cualquier idioma (o combinación de idiomas) que les parezca más conveniente. También pueden utilizar imágenes si lo consideran necesario. Esperamos que estos temas de escritura puedan utilizarse de puntos de conversación entre su estudiante y su amigo.
- En este paquete, los estudiantes aprenderán sobre los 50 estados de los Estados Unidos, los diferentes ríos y los parques nacionales en todo el país; también aprenderán los adjetivos que podemos usar para describir estos diferentes entornos. Se anima a los estudiantes a establecer conexiones con sus propios entornos con los lugares que han visitado.

Sinceramente,

Kara Viesca

Kara Mitchell Viesca, PhD
Associate Professor of Language Education
University of Nebraska Lincoln
Teaching, Learning and Teacher Education
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ICMEE is housed within:



Share your learning!

Share a picture of any of your work by using **#MultilingualProud** on social media.

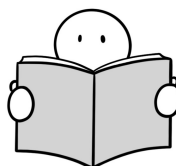
We'd love to see what you've done with this packet!



Instructions Key



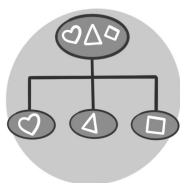
- Share with someone else
- Comparte con alguien más
- مشاركتها مع شخص آخر
- La wadaag qof
- Chia sẻ với ai đó



- Read
- Lee
- اقرأ
- Akhriso
- Đọc



- Write
- Escribe
- اكتب
- Qor
- Viết



- Sort
- Ordena
- رتب
- Kala sooc
- Lựa chọn



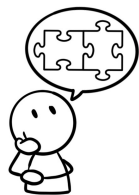
- Move your body
- Mueve tu cuerpo
- حرك جسمك
- Dhaqdhaqaaqa jirkaaga
- Di chuyển cơ thể của bạn



- Cut
- Corta
- قص الورقة
- Waraaqda jar
- Cắt giấy



- Read out loud
- Lee en voz alta
- قراءة بصوت عال
- Kor u aqri
- Đọc to



- Make a connection
- Hacer una conexión
- إجراء اتصال
- Xiriir samee
- Tạo kết nối

123

- Count
- Cuenta
- العدد
- Tiri
- đếm



- Draw
- Dibuja
- رسم
- Sawir
- Vẽ tranh



- Find
- Encuentra
- وجد
- Soo hel
- Tìm thấy


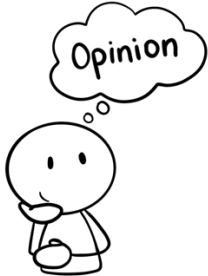

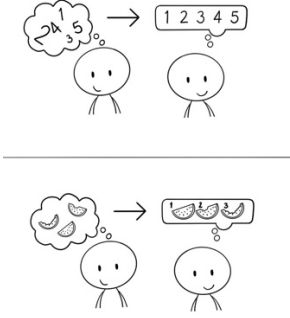



- Color
- Colorea
- لون
- Midab gudaha
- làm cho hoa mỹ

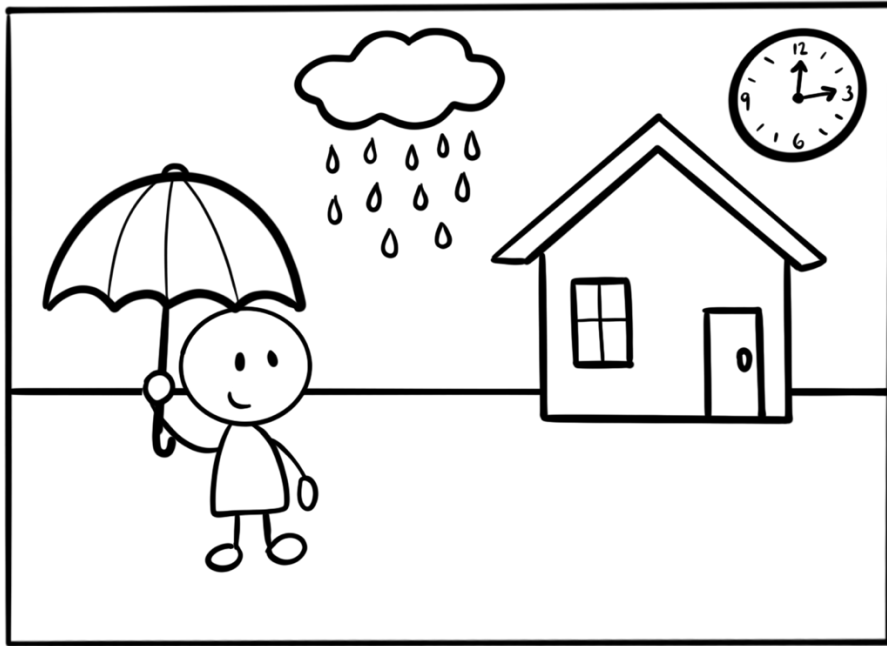


- Share with your Buddy
- Comparte con tu Buddy
- شارك مع صديقك
- La wadaag asxaabtaada
- Chia sẻ với bạn bè của bạn

Thinking Skills Glossary

Word	Definition	Picture
Fact 事实 Hecho	something we know, without question 我们知道的毫无疑问 Algo que podemos comprobar	
Opinion 意见 Opinión	something we think or believe 我们认为或相信的事情 Algo que pensamos	
Compare 相比 Comparar	think about how two or more things are the same or different 考虑一下两个或多个事物是相同还是不同 Pensar en qué se parecen y en qué son diferentes dos o más cosas	
Sequence 序列 Secuencia	to put things in the right order from first to last 从头到尾正确地安排事情 Poner las cosas en orden , del primero al último	
Classify Sort Categorize 分类 Clasificar Organizar	to put things into groups by how they are the same 通过相同的方式将事物分组 Agrupar cosas por cómo se parecen	

Question Words



Who?



When?



Where?



What?



Why?



iPhone Instruction Icons



Write a text message
写短信
Escribe un mensaje



Tweet: write one sentence
推特：写一句话
Tweet: escribe una oración



Post on Facebook: write a few sentences
在Facebook上发布：写几句话
Publica en Facebook: escribe algunas oraciones



Post on Instagram: write a sentence and draw a picture
在Instagram上发布：写一个句子并画一幅画
Publica en Instagram: escribe una oración y dibuja



Write an email: write a paragraph
写一封电子邮件：写一个段落
Escribe un correo electrónico: escribe un párrafo

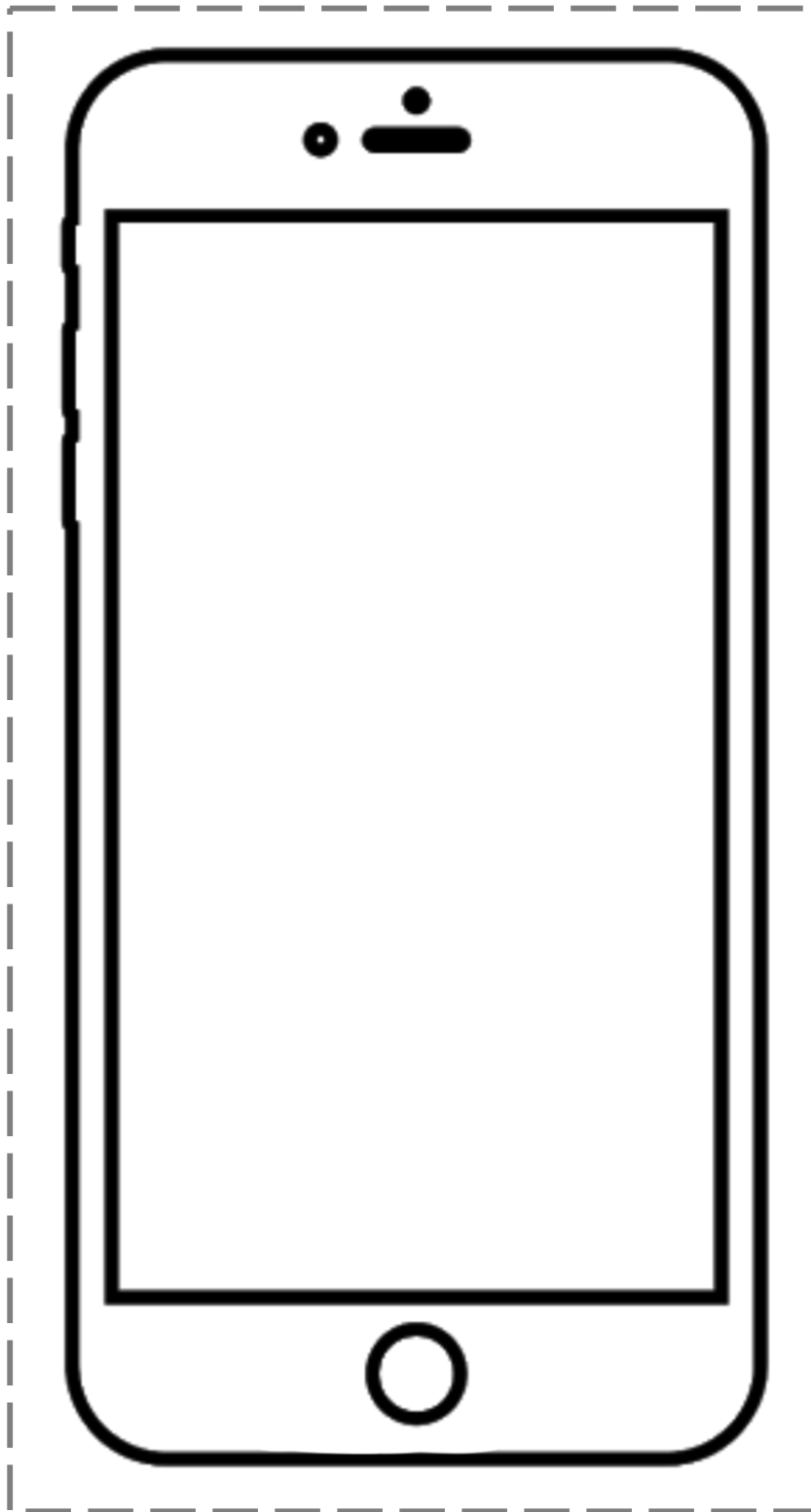


Record a voice message
录制语音留言
Graba un mensaje de voz



Make a phone call
打个电话
Haz una llamada







Day 1

Exploring the World Around You

The United States

Label as many states as you know on this map of the United States. It may be helpful to color the map as you work!



States in the United States

Alabama	Hawaii	Massachusetts	New Mexico	South Dakota
Alaska	Idaho	Michigan	New York	Tennessee
Arizona	Illinois	Minnesota	North Carolina	Texas
Arkansas	Indiana	Mississippi	North Dakota	Utah
California	Iowa	Missouri	Ohio	Vermont
Colorado	Kansas	Montana	Oklahoma	Virginia
Connecticut	Kentucky	Nebraska	Oregon	Washington
Delaware	Louisiana	Nevada	Pennsylvania	West Virginia
Florida	Maine	New Hampshire	Rhode Island	Wisconsin
Georgia	Maryland	New Jersey	South Carolina	Wyoming

Which states did you know right away?

Which states were difficult for you?

Exploring the World Around You

"America the Beautiful"

In 1893 a woman named, Katharine Bates visited Colorado Springs, Colorado. She was in awe of the beauty of the mountain, Pikes Peak. Looking at this majestic mountain, she was inspired to write a poem she titled, "America the Beautiful." This poem is now a song that represents the beauty of the United States.

Read this excerpt from the poem. She uses adjectives or describing words to help describe what she was looking at.

America the Beautiful

O beautiful for spacious skies,
For amber waves of grain,
For purple mountain majesties
Above the fruted plain!
America! America!
God shed His grace on thee,
And crown thy good with brotherhood
From sea to shining sea!

Amber – a yellowish
gold color

Spacious – large
and open

Fruited – full of good
things like fruit

Now, annotate this part of the poem with adjectives that you find.

Oh beautiful for peaceful skies
For amber waves of grain
For purple mountain majesties
Above the enameled plain!
America! America!
God shed His grace on thee,
Till souls wax fair as earth and air
And music-hearted sea!







How do adjectives help you with understanding this poem?

Exploring the World Around You

Practicing with Adjectives

Adjectives are words that we use to help describe what something looks like, feels like, or tastes like. Adjectives are used to express our five senses (sight, hearing, tasting, feeling, and smelling). When we use adjectives, it allows other people to understand our perspective of something better.

Use adjectives to describe each of the items below:

Item	Adjectives
Pine Tree 	green tall spiky rough natural
Squirrel 	
Robin 	
Sunflower 	
Ant 	
Cloud 	
Your Choice: <hr/>	
Your Choice: <hr/>	

Day 2

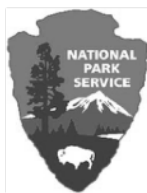
Exploring the World Around You

History of National Parks

Read the following article and answer the connection questions about the history of National Parks in the United States.

The National Park Service is a department within the United States Federal Government. Their job is to protect and maintain public land that is separate and protected. Today, the National Park Service manages over 84 million acres of land across the United States. We have the biggest Park Service in the world.

When America was first being explored, many people only saw nature as a source of food, clothing, and shelter. They were looking to use nature to help them survive. However, many writers and artists were inspired by the nature they saw. They wrote books and created art that reflected the beauty they saw in nature. They advocated to the government asking for these parts of nature to be protected. In 1864, President Abraham Lincoln created the Yosemite Grant Act to protect the land in Yosemite Valley, California. This was the first step towards protecting nature.



In 1872, the United States Congress created the Yellowstone National Park Protection **Act**. This Act protected over 1 million acres of public land. The land was only to be used for enjoyment and recreation. This Act created Yellowstone National Park which was the world's first national park.

In 1906, President Theodore Roosevelt continued to protect land in the United States. He created a law that protected prehistoric Native American land, ruins, and artifacts. This helped the United States continue to protect both nature and cultural lands.

It was a lot of work to protect and manage the new National Parks all over the United States. In 1916, President Woodrow Wilson started the National Park Service as part of the government. Now there was one central group of people who were protecting the natural and historic objects in the National Parks. This includes the animals. They protect the land to provide enjoyment for people today and in the future.

Today, the National Park Service is made up of 417 different parks. They manage more than 84 million acres of land. More than 300 million people visit the parks each year.

Have you ever been to a National Park?

Do you see nature as a resource or as an inspiration? Why?

Act – a law that has gone through a lot of reviews to be approved and made a law.

Do you think it is a good idea to protect **both** the nature and the culture of our land? Why?

Exploring the World Around You

Describing National Parks

Many people have visited the National Parks across the country. Have you? When people visit the National Parks they have a lot of adjectives to describe what they saw.

Walk around your neighborhood and ask people about their trips to National Parks.

Question:

1. Have you ever visited a National Park?
2. Where did you visit?
3. How would you describe it?

National Park Visited	Adjectives to Describe
My neighbor, Susana, visited Redwood State Park.	The trees were very <u>tall</u> . The trees were very <u>green</u> and provided a lot of shade so it was <u>chilly</u> . The walkways were <u>windy</u> .

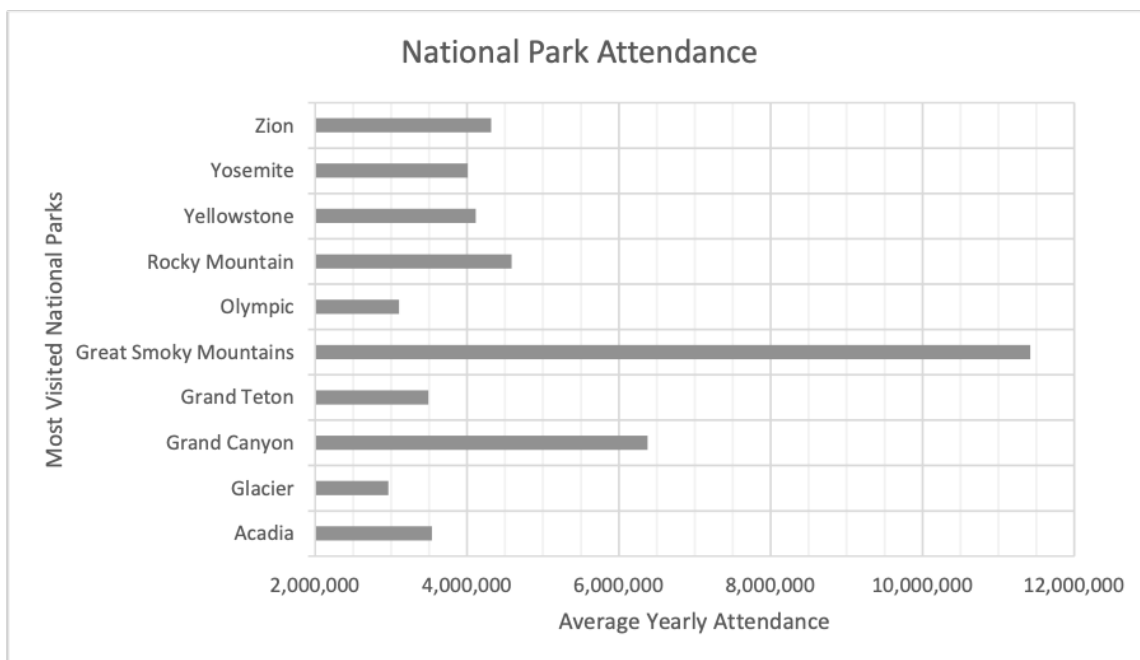
What adjectives did people use?

- Tall
- Green
- Chilly
- Windy

Exploring the World Around You

Comparing National Parks

Read through the following data tables about some of our National Parks. Answer the questions at the bottom.



1. How many more people visited the most popular park than Glacier National Park?
2. Which of the following is the correct order showing the least popular to the most popular?
 - a. Olympic, Rocky Mountain, Grand Teton
 - b. Yosemite, Zion, Grand Canyon
 - c. Yellowstone, Acadia, Glacier
3. If Denali National Park in Alaska is number 11 on the list of most visited National Parks, what would you estimate the average yearly attendance to be? How did you calculate your answer?

Day 3

Exploring the World Around You

Biomes in the United States

One reason the United States has so many National Parks is to preserve and protect the variety of biomes. A biome is a unique natural environment with specific plants, animals, land formations and weather.

There are 7 different terrestrial biomes on the land on the Earth and two aquatic biomes. The United States has 5 of these terrestrial biomes. The two aquatic biomes are freshwater and salt water or marine. These two biomes are located all across the Earth.

Deciduous Forest – Deciduous forests are most described by the trees, they are deciduous which means they lose their leaves in the fall. The majority of the United States and Europe is covered with deciduous forests. They have moderate temperatures throughout the year. Not too hot, not too cold. The deciduous forest experiences all four seasons: summer, fall, spring, and winter. Most deciduous forests get 30 to 60 inches of rain or snow every year. Because the weather is very moderate, most humans live in the deciduous forest. Plants and animals are also very plentiful.



Desert – Deserts have the most extreme temperatures on Earth. Some deserts, like the Sahara desert in Africa, are very hot with temperatures over 100 degrees every day. Other deserts, like Antarctica, are very cold with temperatures near freezing every day. The most important thing about a desert is the amount of precipitation (rain or snow) they have every year. Most deserts get less than 20 inches of precipitation every year. Because of this, the plants and animals here must be able to survive long periods of time without water. This is a very extreme environment so a lot of animals live underground in burrows.



Grasslands – Grasslands are wide, sprawling areas of land that are filled with different types of grass and wild flowers. There are not many trees because there is not enough precipitation to

help them grow. Grasslands cover 25% of the Earth and are often destroyed to build farms. Temperatures are similar to a deciduous forest and stay moderate. Grassland biomes get an average of 30 inches of rainfall every year.



Rainforest – Rainforests are the wettest and greenest biome on Earth. It is so green because it rains more than 100 inches every year! The most famous rainforest is probably the Amazon rainforest in South America. The rainforest has the widest variety of plant and animal species of all terrestrial biomes. The rainforest stays a consistent temperature between 70 and 90 degrees all year long. This consistency is due to the fact the rainforest is located along the equator.



Savanna – Savannas are a type of grassland. They are mostly found in the southern hemisphere or half of the Earth. They are also called a tropical grassland. The savanna is full of a variety of grasses with some tall trees that feed the variety of animals that live here. A lot of very large hooved animals like giraffes live in the savanna. There are two seasons in the savanna: rainy season and dry season. During the rainy season, it can rain 25 inches in only a few months! The temperatures are similar to the rainforest.



Taiga (Coniferous Forest) – The taiga is the biggest of all land biomes on Earth. It is found in the northern hemisphere or half of the earth. It is also known as a coniferous forest because of the trees. The trees in the taiga are similar to pine trees, they stay green all year round and do not lose their leaves. They survive off of 25 inches of precipitation each year. Winter can last for 6 months while summer is very short. The temperature throughout the year can be as warm as 70 degrees and as cold as -60 degrees. The animals in the taiga all need ways to stay warm so they have thick fur or a lot of fat. Some birds visit the taiga in the summer but fly south for the winter.

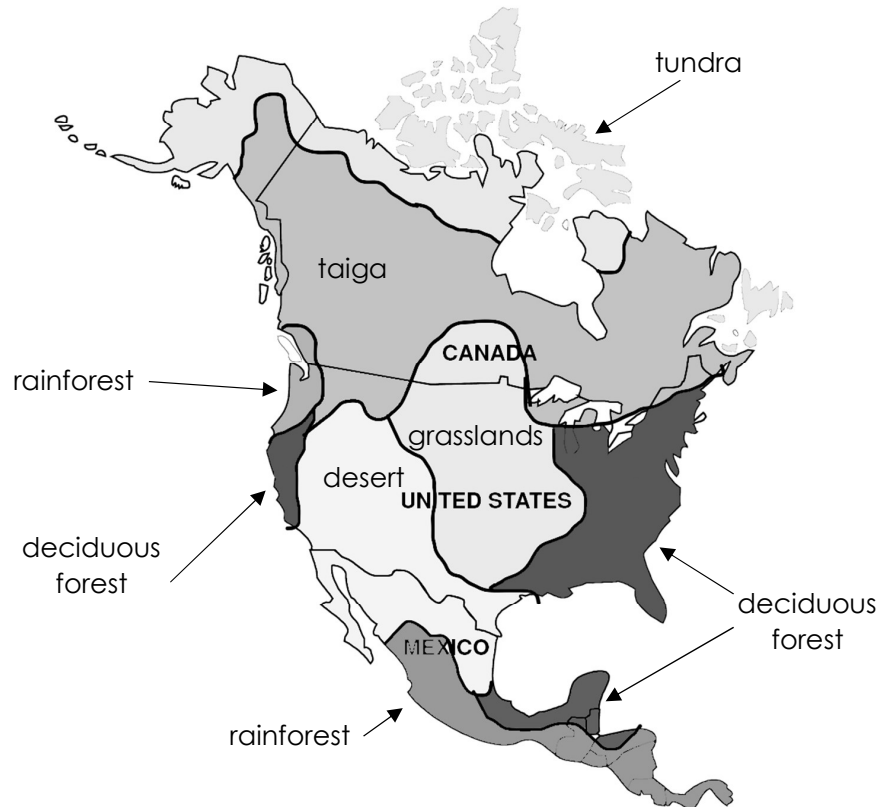


Tundra – The tundra is a frozen desert that is barren. There are very few plants or animals. It is very difficult for anything to survive in the tundra because of the temperature, wind, and precipitation. The temperature in the tundra rarely gets above 60 degrees with only 8 inches of precipitation in the form of snow every year. In the winter, the sun will not rise for 6 months making the temperatures stay below freezing for months at a time. The few animals, like reindeer, that live here are only here in the summer when the sun does not set. They travel south to the taiga in the winter.



Which of these biomes is most interesting to you? Why?

Outline Map of North America



1. Look at the map of North America. What biome do you live in?
2. Many National Parks preserve and protect different biomes. What biome would you want to preserve and protect? Why?

Exploring the World Around You

Calculating the Climates of Biomes

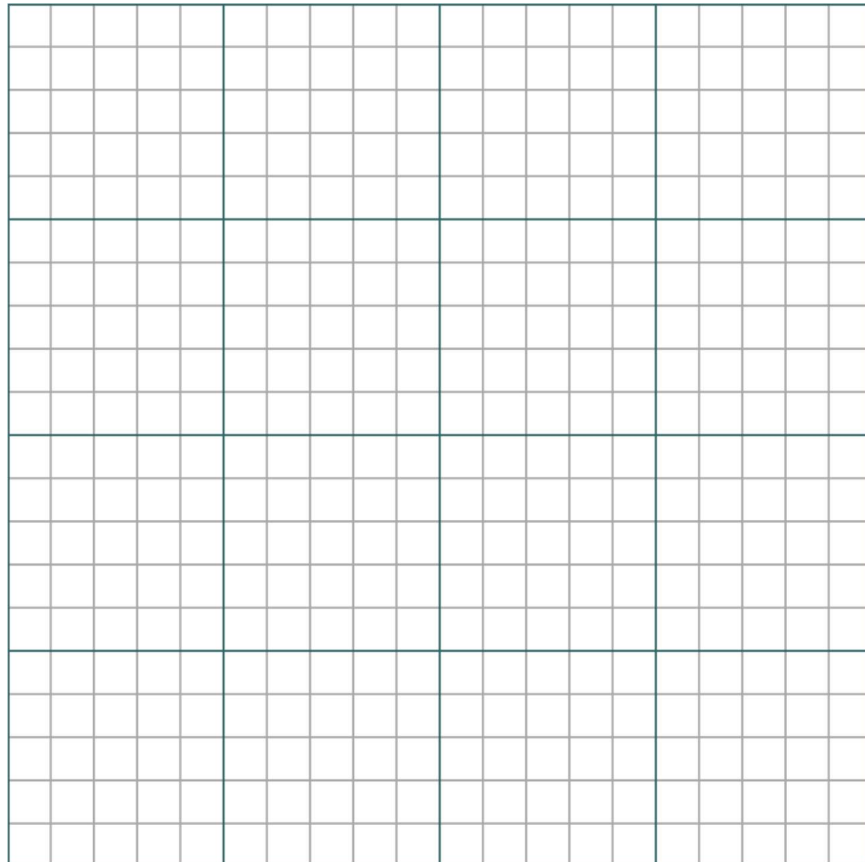
Using the data tables below to create a **line graph** with the rainfall data.

Annual Rainfall (mm) in the Savanna

January	81
February	100
March	121
April	137
May	68
June	23
July	9
August	19
September	34
October	51
November	100
December	97

Annual Rainfall (mm) in the Desert

January	2
February	5
March	5
April	5
May	15
June	35
July	82
August	90
September	62
October	18
November	5
December	2





Day 4

Exploring the World Around You

Community Walk

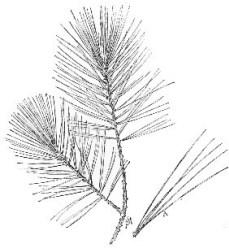
While you walk around your community collecting leaves, pay close attention to the animals and plants that you see. Draw a picture of four things that are interesting to you.

Exploring the World Around You

Identifying Trees

Many scientists use a dichotomous key to help them identify unknown plants and animals. A dichotomous key is a series of two questions. Walk through your community, find 5 different leaves from trees to identify.

Example:



1. a. Has needles – go to 2
2. a. Needles are in bundles – go to 3
3. a. Has 5 needles – **white pine**

Tree Identification Dichotomous Key

1. a. The tree has needles.....go to 2
b. The tree has leaves.....go to 5
2. a. The needles are in bundles.....go to 3.
b. The needles have scales or bumps.....white cedar
3. a. There are 5 needles.....white pine
b. There are 2 needles.....go to 4
4. a. The needles are thick and spread out.....jack pine
b. The needles are long and thin.....red pine
5. a. The leaf is not made up of little leaves.....go to 8
b. The leaf is made up of several little leaves.....go to 6
6. a. The little leaves start from one point.....go to 7
b. The little leaves do not start from one point.....white ash
7. a. There are 5 little leaves.....buckeye
b. There are 7 little leaves.....horse chestnut
8. a. The leaf has notches or a wavy outside shape.....go to 9
b. The leaf has smooth edges.....go to 10
9. a. The notches and edges are pointed.....silver maple
b. The notches and edges are rounded.....sugar maple
10. a. The leaf is the same size at both ends.....dog wood
b. The leaf is shaped like a heart.....catalpa

Picture of the leaf you collected	Name of the plant
Leaf 1	
Leaf 2	
Leaf 3	
Leaf 4	
Leaf 5	

Exploring the World Around You

Excerpts from, *A Sand County Almanac*, by Aldo Leopold, 1949

Aldo Leopold was a writer and nature enthusiast. He lived from 1887 – 1948. He worked for the National Park Service. During his work, he advocated strongly to preserve and protect the environment. He saw nature as something we can enjoy and admire. He wrote four books, but the most famous is *A Sand County Almanac*.



Read through the excerpts or quotes below and answer the questions after each quote.

pg. xvii: "There are some who can live without wild things, and some who cannot. ... For us of the minority, the opportunity to see geese is more important than television, and the chance to find a pasque-flower (rare purple flower) is a right as inalienable as free speech. These wild things, I admit, had little human value until [the development of machines and technology] assured us of a good breakfast, and until science disclosed the drama of where they come from and how they live. The whole conflict thus boils down to a question of degree. We of the minority see a law of diminishing returns in progress; our opponents do not."

1. In this quote, Aldo Leopold explains that we value technology and machines. He then points out that technology and machines are ruining nature. Do you think nature or technology are more important? Why?

pg. 138: "We reached the old wolf in time to watch a fierce green fire dying in her eyes. I realized then, and have known ever since, that there was something new to me in those eyes – something known only to her and to the mountain. I was young then, and full of trigger-itch; I thought that because fewer wolves meant more deer, that no wolves would mean hunters' paradise. But after seeing the green fire die, I sensed that neither the wolf nor the mountain agreed with such a view."

2. What do you think happened to the wolf? Why does he say, "neither the wolf nor the mountain agreed with such a view"?

pg. 189: "Conservation is a state of harmony between men and land. By land is meant all of the things on, over, or in the earth. Harmony with land is like harmony with a friend; you cannot cherish his right hand and chop off his left. That is to say, you cannot love [to hunt] and hate predators; you cannot conserve the waters and waste the [mountain] ranges; you cannot build the forest and mine the farm. The land is one organism. Its parts, like our own parts, compete with each other and co-operate with each other."

3. How does this quote support the need for the National Park system and to preserve and protect land and nature?

p. 270: "Wilderness areas are first of all a series of sanctuaries for the primitive arts of wilderness travel, especially canoeing and [camping]."

4. What is your opinion of preserving and protecting land and nature?



Day 5

Exploring the World Around You

Adjective Practice

For each of the adjectives listed, write synonyms that provide a similar description.

Adjective:	Synonyms:
pretty	EX. beautiful, gorgeous, cute, appealing, lovely
tall	
big	
small	
bumpy	
smooth	
long	
open	
colorful	

Journal: What would you preserve?

[illegible]

[illegible]UNIVERSITY OF
Nebraska
Lincoln®

Reference Sheet

LENGTH

Metric

1 kilometer = 1000 meters
 1 meter = 100 centimeters
 1 centimeter = 10 millimeters

Customary

1 mile = 1760 yards
 1 mile = 5280 feet
 1 yard = 3 feet
 1 foot = 12 inches

CAPACITY AND VOLUME

Metric

1 liter = 1000 milliliters

Customary

1 gallon = 4 quarts
 1 gallon = 128 ounces
 1 quart = 2 pints
 1 pint = 2 cups
 1 cup = 8 ounces

MASS AND WEIGHT

Metric

1 kilogram = 1000 grams
 1 gram = 1000 milligrams

Customary

1 ton = 2000 pounds
 1 pound = 16 ounces

TIME

1 year = 365 days
 1 year = 12 months
 1 year = 52 weeks
 1 week = 7 days
 1 day = 24 hours
 1 hour = 60 minutes
 1 minute = 60 seconds



ICMEE is housed within:

